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Demand data from online auctions (1) → Dynamic On-line Estimator (2) → Promotion Scheme Parameters (3) → Electronic Coupon System (4)

Figure 1: System for Dynamic On-line Learning for Electronic Coupons

Demand Data from online
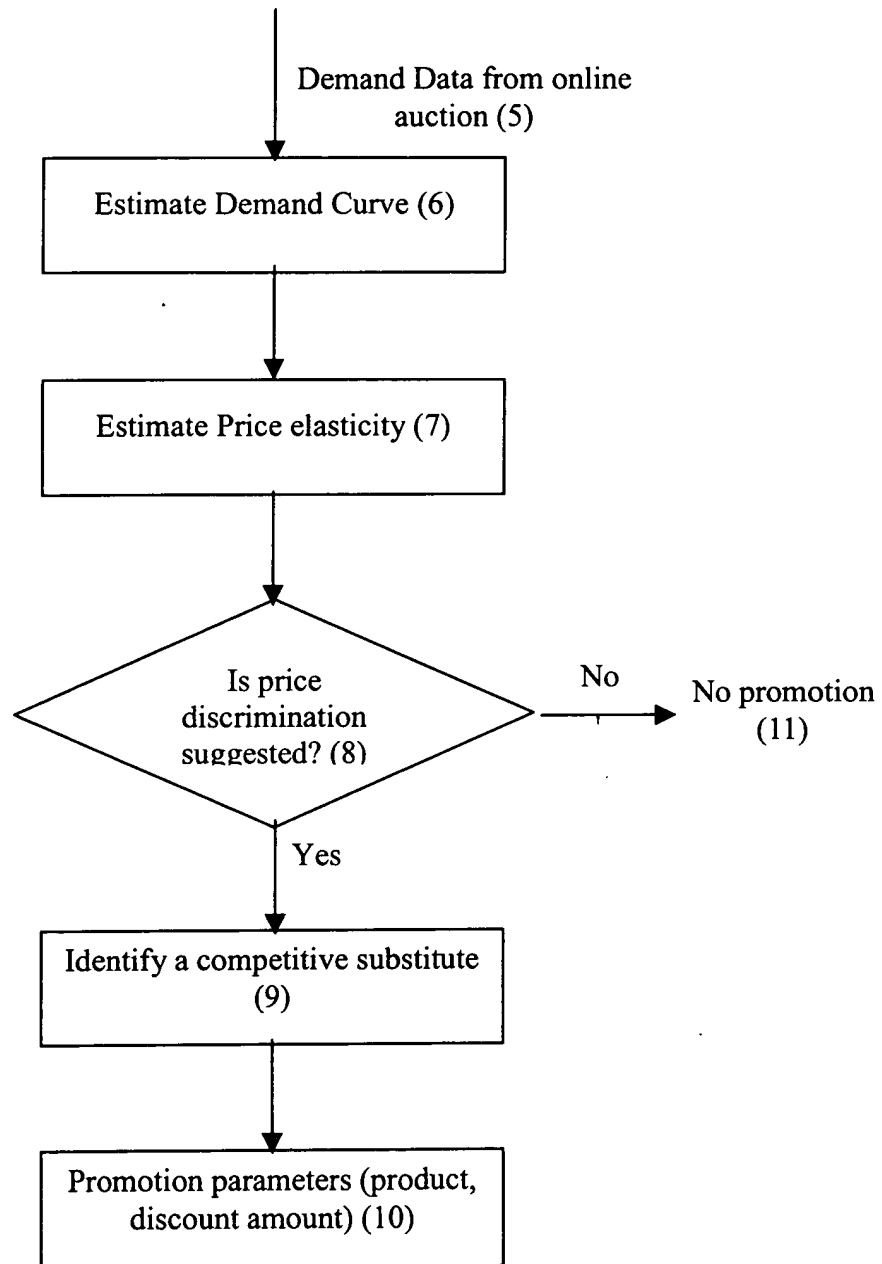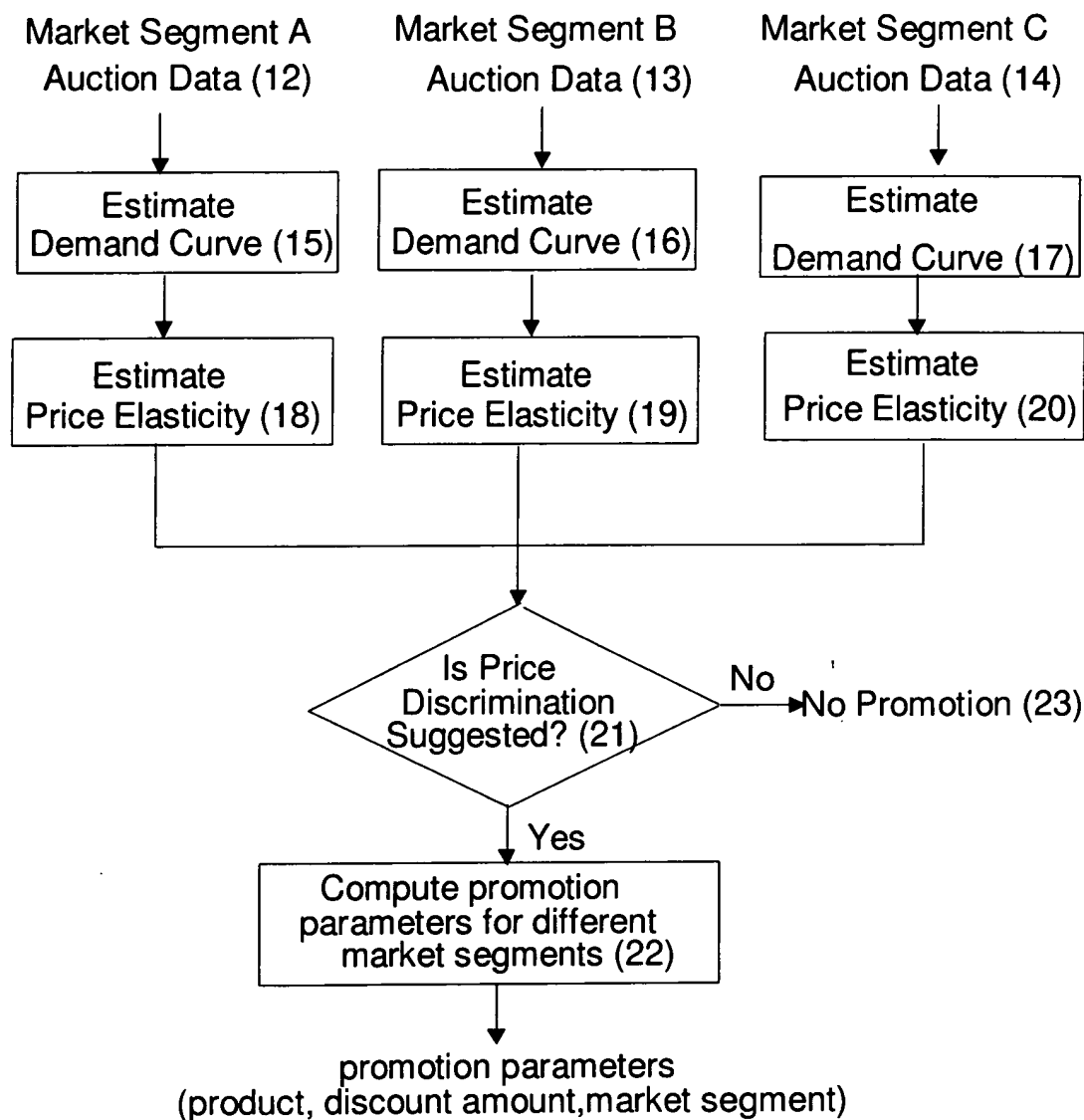auction (5)

Estimate Demand Curve (6)

Estimate Price elasticity (7)

Is price
discrimination
suggested? (8)

No → No promotion
(11)

Yes

Identify a competitive substitute
(9)

Promotion parameters (product,
discount amount) (10)

Figure 2

Market Segment A
Auction Data (12)

Market Segment B
Auction Data (13)

Market Segment C
Auction Data (14)

Estimate
Demand Curve (15)

Estimate
Demand Curve (16)

Estimate
Demand Curve (17)

Estimate
Price Elasticity (18)

Estimate
Price Elasticity (19)

Estimate
Price Elasticity (20)

Is Price
Discrimination
Suggested? (21)

No →No Promotion (23)

Yes

Compute promotion
parameters for different
market segments (22)

promotion parameters
(product, discount amount,market segment)

Figure 3